

**REMARKS**

Applicants have amended Claims 1, 2 and 6-11. Support for the amendments to Claim 1 may be found for example, on pages 20 and 21 (paragraphs [0064] and [0065]) of the Specification. Support for the amendments to Claims 2 and 6-11 may be found in the originally filed Claims.

Applicants submit that no new matter is presented by these amendments and respectfully request entry of the same.

***Objections to the Drawings***

Applicants hereby submit a Replacement Drawing Set (Figures 1-15) in order to overcome the Examiner's objections. The drawing sheets are appended herewith following page 9 of this paper.

***Claim Objections are Obviated***

The Examiner has objected to Claims 7-11 under 37 CFR 1.75(c) for allegedly being improperly dependent from the multiple dependent Claim 6. Applicants have amended Claims 7-11, thereby obviating this objection.

***Claim Rejections under 35 U.S.C. §112 should be Withdrawn***

The Examiner has rejected Claim 2 under 35 U.S.C. §112, second paragraph, for allegedly lacking antecedent basis. Applicants have amended Claim 2 to recite "nucleic acid tags" and respectfully submit that this rejection of Claim 2 should be withdrawn.

***Claim Rejections under 35 U.S.C. §102 should be Withdrawn***

The Examiner has rejected claims 1-5, 9-15 and 19-21 under 35 U.S.C. §102(b) as allegedly being anticipated by Baskerville et al. (WO 99/54458, 1999). Applicants respectfully disagree with the Office Action. However, solely to expedite the issuance of the present Claims, Applicants have amended Claim 1 to recite “linking each of the plurality of polypeptides with a nucleic acid tag to obtain tagged polypeptides *using ribosome display.*” Support for the amendment to Claim 1 may be found for example, on pages 20 and 21 (paragraphs [0064] and [0065]) of the Specification. Ribosome display methods or mRNA display methods are examples of in vitro display technologies. In ribosome display, for example, the ribosome initiates the protein synthesis on the mRNA and translocates towards the end of the template. The release of the mRNA and the polypeptide is prevented because of a lack of stop codon at the mRNA level or because of the presence of a 3’ribosome blocking sequence. This leads to a stable non-covalent ternary mRNA-ribosome-polypeptide complex. The conformational integrity of the polypeptide is also preserved.

Baskerville et al. disclose the use of a ribozyme to generate a polypeptide-nucleic acid tag conjugate. The ribozyme sequence is integral to joining a desired nucleic acid tag to a polypeptide of interest to produce a tagged polypeptide. Baskerville et al. do not disclose ribosome display to generate nucleic-acid-tagged polypeptides as recited by the amended Claims.

With regards to Claim 12, Applicants respectfully submit that Baskerville et al. do not disclose hybridizing oligonucleotide-tagged mRNAs to a microarray and subsequently translating the mRNAs to produce a plurality of polypeptides. In

Baskerville et al., the polypeptide-nucleic acid tag conjugate is hybridized to a solid surface (page 26, lines 14-27).

Moreover, in Baskerville et al., the tagged polypeptide bears a peptide tag at its amino terminus, covalently attached to the part of the ribozyme that is attached to the nucleic acid tag. The tagged polypeptide of the presently claimed invention on the other hand, consists of a polypeptide attached to its encoding mRNA which carries a nucleic acid tag.

In view of the above amendments and remarks, Applicants respectfully submit that Baskerville et al. fail to disclose each and every element of the claimed invention. Therefore, the rejection of Claims 1-5, 9-15 and 19-21 under 35 U.S.C. §102(b) should be withdrawn.

***Claim Rejections under 35 U.S.C. § 103 should be Withdrawn***

The Examiner has rejected Claims 6-11 and 16-21 under 35 U.S.C. §103(a) as allegedly being unpatentable over Baskerville et al. in view of Fodor et al. (US Patent No. 5,871,928; 1999). Applicants respectfully disagree with the Office Action.

As discussed above, Baskerville et al. require a ribozyme to link a nucleic acid tag to a polypeptide of interest. The currently-amended Claims are directed to methods of screening a plurality of polypeptides wherein tagged polypeptides are obtained by using ribosome display. Applicants respectfully submit that neither reference, alone or in combination, suggests or motivates the teachings of the present invention.

In view of the above remarks, Applicants respectfully submit that the rejection of Claims 6-11 and 16-21 under 35 U.S.C. §103(a) should be withdrawn.

**CONCLUSION**

For these reasons, Applicants believe the application is now in condition for allowance and should be passed to issue. If the Examiner feels that a telephone conference would in any way expedite the prosecution of the application, please do not hesitate to call the undersigned at (408) 731-5000.

The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account 01-0431.

If the Examiner has any questions pertaining to this application, the Examiner is requested to contact the undersigned agent.

Respectfully submitted,



Priyadarshini Rath  
Limited Recognition under 37 CFR 10.9(b)

Dated: March 15, 2004

Customer No. 22886  
Legal Department  
Affymetrix, Inc.  
3380 Central Expressway  
Santa Clara, CA 95051  
Tel: 408/731-5000  
Fax: 408/731-5392